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(Reaffirmed 2006)

Indian Standard

COTTON TOWELLING AND TOWELS— SPECIFICATION

(First Revision)

भारतीय मानक

सूती तौलियों के कपड़े और तौलिये — विशिष्टि

(पहला पुनरोक्षण)

Second Reprint JUNE 2007 (Including Amendment 1)

UDC 645.486

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BUREAU OF INDIAN STANDARDS MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG NEW DELHI 110002

FOREWORD

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards on 10 October 1989, after the draft finalized by the Cotton and Cotton Products Sectional Committee had been approved by the Textile Division Council.

This standard was originally published in 1973 and the first revision is published to specify requirements of towels in a single specification amalgamating IS 7057: 1973 'Specification for cotton turkish towels'. Also, in this revision the requirements have been aligned to bring these in line with the present manufacturing practices.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2: 1960 'Rules for rounding off numerical values (revised)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

AMENDMENT NO. 1 OCTOBER 1995 TO IS 7056: 1989 COTTON TOWELLING AND TOWELS — SPECIFICATION

(First Revision)

[Page 2, Table 3, Sl No. 6(a)] — Insert the words '(see Note)' after the word 'Light' and incorporate note as under at the end of Table:

'NOTE — In case of 'sulphur dyes', the minimum colour fastness rating shall be 4.'

(TXD 02)

Indian Standard

COTTON TOWELLING AND TOWELS— SPECIFICATION

(First Revision)

1 SCOPE

- 1.1 This standard prescribes constructional details and other particulars of cotton terry (turkish) and huck-a-back towelling and towels; bleached, dyed, printed or striped.
- 1.2 The standard does not specify design, general appearance, feel, finish or shade, etc (see also 5.1).

2 REFERENCES

2.1 The Indian Standards given in Annex A are necessary adjuncts to this standard.

3 FABRIC

3.1 Yarn

The cotton yarn used shall be evenly spun (see IS 171: 1985).

3.2 Fabric Construction

Terry towelling shall meet the construction particulars given in Table 1 and huck-a-back fabric shall conform to the construction particulars given in Table 2. The count of warp and weft are given for guidance only.

3.3 Freedom from Defects

The fabric when visually examined shall be free from spinning, weaving and processing defects (see IS 4125:1987). The bleached fabric shall have a full bleach finish and shall be free from blueing or optical whitening agents, if required by the buyer. In case of dyed fabric the fabric shall be thoroughly scoured prior to dyeing so that the maximum absorbency is obtained. The dyeing shall be uniform without stains, streaks, patches, etc, and shall match the required shade.

3.4 Fabric Properties

The fabric shall conform to the performance requirements given in Table 3. Dyed yarn used in stripes, dyed fabric or printed fabric shall conform to the colour fastness ratings given in Table 3.

4 TERRY/HUCK-A-BACK TOWELS

4.1 Fabric

Towels shall be made from appropriate fabric conforming to 3.

4.2 Sizes

Dimensions of towels shall be as given in Table 4.

4.3 Heading

The maximum depth of plain heading at each end of the towel shall be as specified in Table 4.

4.4 Sewing Thread

Cotton sewing thread of 60s/6 cotton count (N_e) (9.8 tex \times 6) conforming to IS 1720: 1978 shall be used. In case of dyed towels the thread shall be of similar shade.

4.5 Transverse Ends or End Hems

Each transverse end of towel shall have a 13 mm hem with a full turn-in at each end.

4.6 Side Edges

The side edges shall be either selvedges which shall be firm and straight or shall have a 13 mm hem with a full turn-in.

4.7 Stitching

The stitching shall be of even tension and the loose ends shall be finished securely and neatly. The number of stitches shall not be less than 4 per centimetre.

5 SEALED SAMPLE

- 5.1 If, in order to illustrate indeterminable characteristics such as general appearance, lustre, feel and shade, a sample has been agreed upon and sealed, the supply shall be in conformity with the sample in such respects.
- 5.1.1 The custody of the sealed sample shall be a matter of prior agreement between the buyer and the seller.

Table 1 Construction Particulars of Terry Towelling (Clause 3.2)

Count of Yarn, Ne (Approx)		Threads per dm Min		Mass Min	Terry Ratio		
Warp Ground	Pile	Weft	Warp Ground	Pile	West	Min	Min
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
16s/2	16s	14s				$\mathbf{g}/\mathbf{m}^{\mathbf{s}}$	
(36 tex × 2)	(36 tex)	(42 tex)	100	100	200	390	6:1
Method of Test			. 1	S 1963 : 198	31	IS 1964 : 1970	Annex B

Table 2 Construction Particulars of Huck-a-Back Towelling (Clause 3.2)

Count of Yarn, Ne (Approx) · (see Note)		Threads per dm Min		Mass Min
Warp	West	Ends	Picks	
(1)	(2)	(3)	(4)	(5)
14s* (42 tex)	6 s (98 tex)	3 60	135	g/m ^a 290
Method of Test	_	IS 196	3:1981	IS 1964 : 197

Table 3 Performance Requirement for Fabric

(Clauses 3.4)

81	Characteristics	Requirements		Method	
No.		Terry	Huck-a-Back	of Test	
1	Breaking load* on 5.0 × 20 cm strips (ravelled strip method), Min			IS 1969 : 1985	
	Warpway	310 N (32 kgf)	590 N (60 kgf)		
	Weftway	340 N (35 kgf)	330 N (34 kgf)		
2	Scouring loss, percent, Max	2.0	2.0	IS 1 383 : 1977 (Mild methød)	
3	Shrinkage or elongation, percent, Max	3.0	3.0	IS 2977 : 1964	
4	pH value	6.0 to 8.2	6.0 to 8.2	IS 1390 : 1985 (Cold method)	
5	Wettability, Max	10 s	′ 10 s	IS 2349 : 1963	
6	Minimum colour fastness rating to:				
	a) Light	5	5	1S 686 : 1985	
				or IS 24 54 : 19 85	
	b) Washing: Test 4			IS 765 : 1979	
	Change in colour	4	4		
	Staining of adjacent fabrics	4	4		
•(1 N = 0.102 kgf).				

Table 4 Dimensions and Mass of Towels

(Clauses 4.2 and 4.3)

Minimum Dimensions		Maximum Heading	Minimum Mass Per 10 Units,	
Width Length cm	Length	Depth cm	kg	
	cm		Terry	Huck-a-Back
40	60	6.5	1.000	0.750
50	100	6.2	2.000	1.450
60	125	6.2	3.000	2.200
66	112	6.2	2.900	2·150
75	150	6.2	4.450	3.250
80	155	6.5	4 ·800	3.600

6 MARKING

- **6.1** The towelling or towels shall be marked with the following particulars:
 - a) Length and width; and
 - b) Manufacturer's name, initials or trademark, if any.
- 6,1.1 The towelling or towels may also be marked with the Standard Mark.

7 PACKING

7.1 The towelling or towels shall be packed in bales or cases in conformity with the procedure

laid down in IS 1347: 1972 or in IS 293: 1980 as required.

8 SAMPLING

- 8.1 The scale of sampling and criteria for conformity as given in IS 3919: 1966 shall be followed in respect of physical characteristics, namely, ends and picks, width, length, mass and breaking load.
- **8.2** The scale of sampling and criteria for conformity as given in IS 5463: 1969 shall be followed in respect of the chemical characteristics, namely, scouring loss, pH value and colour fastness.

ANNEX A

(Clause 2.1)

LIST OF REFERRED INDIAN STANDARDS

IS No.	Title	IS No.	Title
171 : 1985	Cotton and cotton regenerated cellulosic fibre blended grey yarn	1390 : 1983	pH value of aqueous extract of textile materials (first revision)
293 : 1980	(third revision) Code for seaworthy packaging of	1720 : 1978	Cotton sewing threads (second revision)
2,50 . 2000	cotton yarn and cloth (third revision)	1963 : 1981	Threads per unit length in woven fabrics (second revision)
686:1985	Colour fastness of textile materials to daylight (first revision)	1964 : 1970	Weight per square metre and weight per linear metre of fabrics (first revision)
765 : 1979	Colour fastness of textile materials to washing: Test 4 (second revision)	1969: 1985	Breaking load and elongation of woven textile fabrics (second revision)
1347 : 1972	Inland packaging of cotton cloth and yarn (first revision)	2349:1963	Wettability of cotton fabrics
1383:1977	Scouring loss in grey and finished cotton textile materials (first revision)	2454 : 1985	Colour fastness of textile materials to artificial light (xenon lamp) (first revision)

IS 7056: 1989

Title IS No. Title IS No. 2977: 1964 Dimensional changes in woven physical characteristics fabrics (other than wool) on 4125 : 1987 Glossary of terms pertaining to soaking in water defects in fabrics (first revision) Method for sampling cotton fabric 3919:1966 Methods for sampling cotton 5463:1969 for chemical tests for determination of fabrics

ANNEX B

(*Table* 1)

DETERMINATION OF TERRY RATIO

B-1 Cut out a 10 cm × 10 cm specimen from the fabric and condition the specimen in the standard atmosphere for testing. Remove warp threads from the specimen so as to provide 10 threads each from the specimen of ground warp and of terry warp. Determine the mean straightened length of each group of 10 threads.

Express the terry ratio as the ratio of the mean straightened length of the terry warp threads to the mean straightened length of the ground warp threads.

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This Indian Standard has been developed from Doc: No. TDC 2 (2522).

Amendments Issued Since Publication

Amendment No.	Date of Issue	Text Affected
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